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(54) CLEANING LIQUID

(57)Abstract:

PROBLEM TO BE SOLVED: To obtain a cleaning liquid capable of efficiently removing metal impurities on the surfaces of substrates without causing the problems of metal corrosion, storability, environmental loads and the like, and useful for cleaning chemically and mechanically polished wafers or the like by including a specific chelating agent without including hydrogen fluoride.

SOLUTION: This cleaning liquid free from hydrogen fluoride and used for cleaning substrates to which metal wirings are applied contains (A) oxalic acid (ammonium) or (B) a polyaminocarboxylic acid such as ethylene diamine tetraacetate (ammonium). The cleaning liquid preferably contains both the components A and B, and can react with Fe of metal impurity to form a ternary complex having good solubility, thereby capable of enhancing cleanability. The cleaning liquid well forms complexes not only with Fe but also with metal impurities such as Mn, Al and Ce, and is thereby effective for cleaning and removing the metal impurities.

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